

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-13 (Cancelled)

14. (Currently Amended) A method of constructing a *Schizosaccharomyces pombe* yeast cell which produces a heterologous protein, comprising deleting or inactivating at least one *S. pombe* gene encoding enzyme selected from the group consisting of dipeptidyl aminopeptidase (SPC14C4.15c), cytoplasmic aminopeptidase (SPAC13A11.05), aspartic protease (SPCC 1795.09), pyruvate decarboxylase pdc1 (SPAC1F8.07c), serine protease isp 6 (SPAC4AF8.04), aminopeptidase (SPC4F10.02), carboxypeptidase (SPBC16G5.09), carboxypeptidase (SPBC337.07c), vacuolar carboxylase S (SPAC24C9.08), zinc protease (SPCUNK4.12c), zinc protease SPCC1442.07c, metalloprotease (SPCC965.04c), zinc metalloprotease (SPAC17A5.04c), CAAX prenyl protease I (SPC3G1.05), dipeptidyl peptidase (SPBC1711.12), dipeptidase (SPCC965.12), methionine metallopeptidase (SPBC 14C8.03), methionine aminopeptidase (SPBC3E7.10), signal peptidase (SPAC1071.04c), and mitochondrial peptidase β subunit (SPBP23A10.15c) ~~dipeptidyl aminopeptidase, cytoplasmic aminopeptidase, aspartic protease, pyruvate decarboxylase pdc1, serine protease isp 6, aminopeptidase, carboxypeptidase, earboxypeptidase, vacuolar carboxylase S, zinc protease, zinc protease, metalloprotease, zinc metalloprotease, CAAX prenyl protease I, dipeptidyl peptidase, dipeptidase, methionine metallopeptidase, methionine aminopeptidase, signal peptidase, and mitochondrial peptidase β -subunit; and~~ transforming the *Schizosaccharomyces pombe* yeast cell with a polynucleotide which encodes the heterologous protein,

wherein the deletion or inactivation of the at least one gene results in increased production of the heterologous protein compared to a *Schizosaccharomyces pombe* yeast cell in which the at least one gene has not been deleted or inactivated.

15. (Currently Amended) The method of Claim 14, wherein the at least one enzyme is a pyruvate decarboxylase pdc 1.

16. (Previously Presented) The method of Claim 14, wherein the at least one enzyme is an aspartic protease.

17. (Currently Amended) The method of Claim 14, wherein the at least one enzyme is a serine protease isp 6.

18. (Previously Presented) The method of Claim 14, wherein the at least one enzyme is an aminopeptidase.

19. (Previously Presented) The method of Claim 14, wherein the at least one enzyme is a carboxypeptidase.

20. (Currently Amended) A method of producing a heterologous protein, comprising constructing a *Schizosaccharomyces pombe* yeast cell in which at least one *S. pombe* gene is deleted or inactivated, wherein the at least one *S. pombe* gene encodes an enzyme selected from the group consisting of dipeptidyl aminopeptidase, cytoplasmic aminopeptidase, aspartic protease, pyruvate decarboxylase pdc1, serine protease isp 6, aminopeptidase, carboxypeptidase, carboxypeptidase, vacuolar carboxylase S, zinc protease, zinc protease,

~~metalloprotease, zinc metalloprotease, CAAX prenyl protease I, dipeptidyl peptidase, dipeptidase, methionine metallopeptidase, methionine aminopeptidase, signal peptidase, and mitochondrial peptidase β subunit dipeptidyl aminopeptidase (SPC14C4.15), cytoplasmic aminopeptidase (SPAC13A11.05), aspartic protease (SPCC 1795.09), pyruvate decarboxylase pdc1 (SPAC1F8.07), serine protease isp 6 (SPAC4AF8.04), aminopeptidase (SPC4F10.02), carboxypeptidase (SPBC16G5.09), carboxypeptidase (SPBC337.07c), vacuolar carboxylase S (SPAC24C9.08), zinc protease (SPCUNK4.12c), zinc protease SPCC1442.07c), metalloprotease (SPCC965.04c), zinc metalloprotease (SPAC17A5.04c), CAAX prenyl protease I (SPC3G1.05), dipeptidyl peptidase (SPBC1711.12), dipeptidase (SPCC965.12), methionine metallopeptidase (SPBC 14C8.03), methionine aminopeptidase (SPBC3E7.10), signal peptidase (SPAC1071.04c), and mitochondrial peptidase β subunit (SPBP23A10.15c); and~~

transforming the *Schizosaccharomyces pombe* yeast cell with a polynucleotide which encodes the heterologous protein,

wherein the deletion or inactivation of the at least one gene results in increased production of the heterologous protein compared to a *Schizosaccharomyces pombe* yeast cell in which the at least one gene has not been deleted or inactivated;

culturing the yeast cell constructed such that the heterologous protein is produced by the yeast cell; and collecting the heterologous protein.

21. (Currently Amended) The method of Claim 20, wherein the at least one enzyme is a pyruvate decarboxylase pdc1.

22. (Previously Presented) The method of Claim 20, wherein the at least one enzyme is an aspartic protease.

23. (Currently Amended) The method of Claim 20, wherein the at least one enzyme is a serine protease isp6.

24. (Previously Presented) The method of Claim 20, wherein the at least one enzyme is an aminopeptidase.

25. (Previously Presented) The method of Claim 20, wherein the at least one enzyme is a carboxypeptidase.